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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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AMIN & TUROCY, LLP
24TH FLOOR, NATIONAL CITY CENTER
1900 EAST NINTH STREET
CLEVELAND, OH 44114

EXAMINER	
SINGH, RACHNA	

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/364,522	HORVITZ ET AL.	
	Examiner	Art Unit	
	Rachna Singh	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 June 2004* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. This action is responsive to communications: Amendment filed 6/16/04.

2. Claims 1-43 are pending in the case. Claims 1, 13, 19, and 26 are independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3, 9, 19-21, 23, 26, 28, 34, 37, 41, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forscher, Stewart, "CyberNag (Mailmen Division) Project Notebook", 2/21/1996, Available:

http://www.cc.gatech.edu/computing/classes/cs3302_96_winter/projects/groups/MailMen in view of Cohen, "Learning Rules that Classify E-Mail", 1996 (as disclosed at http://www-2.cs.cmu.edu/~wcohen/pubs-t.html).

In reference to claims 1, 19, and 26, Forscher teaches a message organizing system in which he specifically focuses on email prioritization. See page 3. Forscher's project description comprises the following features:

-An email parsing state in which mail messages are read from a given file or input. See page 4. Compare to ***"receiving a document"***.

-Based on the priorities, the prioritization stage will assign an integer priority to the message. A word with a certain priority can then set off his or her pager. See page 3. Compare to ***"alerting a user to the document based on a predetermined criteria"***.

-A prioritization stage in which the document will be scanned for keywords obtained from a user-defined keyword/priority setup file. See pages 4-5. Forscher teaches the user of a document classifier; however, he does not teach a trained classifier, but Cohen does. Cohen's "Learning Rules that Classify E-mail" teaches a trained classifier for purposes of prioritizing a document. Cohen discloses the use of a learning text classifier to help with classification problems when filtering and filing personal e-mail messages. Cohen discloses the use of a Bayesian text classifier. See page 1, column 2 and page 3. Cohen teaches training text classifiers. See page 2, *Learning Algorithms*. Cohen further teaches the use of training data and training sets. Compare to ***"a trained document classifier"***. It would have been obvious to a person of ordinary skill in the art at the time of the invention to implement Cohen's "trained document classifier" into Forscher's system of prioritizing documents and alerting the user based on a predetermine criteria because a classifier that can be trained would allow the construction of a system for filtering and classifying documents such as e-mail, Netnews articles, or Web pages in a manner where traditional keyword-spotting (as taught by Forscher) fails to provide the accuracy that is gained by using a trained classifier. See Cohen's "Learning Rules that Classify E-mail", pages 1-2 in which Cohen discloses the advantages of using a trained classifier over the traditional

keyword spotting techniques as taught by Forscher. Compare to ***"generating a priority of the document based on a trained document classifier;"***.

In reference to claims 2, 20, and 34, Forscher's system deals with documents in an email system. See page 3.

In reference to claims 3, 21, 28, and 37, Forscher teaches that based on the priority of the document and user settings, a user's pager may go off when receiving a word with a certain priority. See page 3. Compare to ***"alerting the user comprises playing a sound based on the predetermined criteria"***.

In reference to claims 9, 23, and 41 Forscher teaches that based on the priorities, the prioritization stage will assign an integer priority to the message. A word with a certain priority can then set off his or her pager. See page 3.

In reference to claim 43, it was well-known in the art at the time of the invention to utilize computer programs for performing steps such as alerting, classifying.

5. Claims 4-7, 29, and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forscher, Stewart, "CyberNag (Mailmen Division) Project Notebook", 2/21/1996, Available:

http://www.cc.gatech.edu/computing/classes/cs3302_96_winter/projects/groups/MailMen , in view of Cohen, "Learning Rules that Classify E-Mail", 1996 (as disclosed at http://www-2.cs.cmu.edu/~wcohen/pubs-t.htmlas applied in claim 1, 19, and 26 above, and further in view of Henderson et al., US 6,185,603 B1, 2/6/01 (filed 3/13/97).

In reference to claims 4 and 38, Forscher/Cohen does not teach opening the document based on the predetermined criteria; however, Henderson does. Henderson

teaches a means in which a message can be opened on a recipient's workstation based on the predetermined code. See column 3. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Forscher/Cohen's predetermined criteria settings with a means for opening the document based on the criteria as taught by Henderson since opening the document based on a criteria would provide a means to notify the user immediately of a document that needs attention just as Forscher's settings for alerting a pager would.

In reference to claims 5, 29, and 40, Forscher/Cohen does not teach sizing the document based on its priority; however, Henderson teaches a system in which the user can control the display features of an email message. In column 8, Henderson discloses that messages having difference priority display attributes can be displayed in different sizes. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Forscher/Cohen's predetermined criteria settings with a means for sizing the document based on the criteria as taught by Henderson since both Forscher/Cohen and Henderson are concerned with the ranking, delivery, and alerting of messages to a user and a sizes can indicate importance of document (i.e. a larger display size may indicate a higher priority).

In reference to claims 6 and 39, Henderson teaches a system in which the user can control the display features of an email message. This can include centrally locating the document. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Forscher/Cohen's predetermined criteria settings for controlling display features of the document based on the criteria as taught by

Henderson since centrally located documents acquire the user's attention better than any other location on a display device.

In reference to claim 7, Henderson teaches a system in which the user can control the display features of an email message. Display features can include the document focus. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Forscher/Cohen's predetermined criteria settings for controlling display features of the document based on the criteria as taught by Henderson since focus is used to direct a user's attention to the most important item on the display device.

6. Claims 8, 10-12, 22, 24-25, 27, 32-33, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forscher, Stewart, "CyberNag (Mailmen Division) Project Notebook", 2/21/1996, Available: http://www.cc.gatech.edu/computing/classes/cs3302_96_winter/projects/groups/MailMen , in view of Cohen, "Learning Rules that Classify E-Mail", 1996 (as disclosed at http://www-2.cs.cmu.edu/~wcohen/pubs-t.html, as applied in claim 1, 19, and 26 above, and further in view of Lewis, "Evaluating and Optimizing Autonomous Text Classification Systems", 1995 ACM.

In reference to claims 8 and 22, Forscher/Cohen teaches setting off a user's pager depending on the priority of a message; however, does not teach opening an agent based on the predetermined criteria; however, Lewis does. Lewis teaches the use of an agent program which monitors and alerts a user when a relevant message appears based on the ranked retrieval system. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Forscher/Cohen with Lewis' teachings of opening an agent program to monitor and alert users of relevant messages because Forscher/Cohen alerts users based on document priority which is in essence a "relevant message". Furthermore, providing an agent to monitor and alert users of relevant messages in the system of Forscher would allow the user to be notified of high priority documents.

In reference to claims 10, 24, and 42, Forscher/Cohen teaches alerting a user via a pager upon receiving a relevant document; however he does not determine when the user is busy and alerting the user upon the priority exceeding a threshold. Lewis discloses a document categorization system that determines the cost of a document and ranks the retrieval of the system. The user is alerted when text considered to be relevant appears. The system determines the effectiveness of reviewing a document using a text classifier. See pages 246-249. Lewis does not state determining if the user is busy; however, he does take into account the expected loss of non-review and alerts the user based on that. It would have been obvious to one of ordinary skill in the art to determine if the user was busy or not since it takes into account the loss of not reviewing a message at the given time. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Lewis into the system of Forscher/Cohen since a user would want to review a document of high priority or importance, thus alerting the user upon the priority exceeding a threshold would draw the user's attention to important messages.

In reference to claims 11 and 25, Forscher/Cohen does not teach displaying a plurality of documents in order according to priority; however, Lewis teaches ranking documents such that the best documents are displayed first followed by the ranking of other documents. See page 246. It would have been obvious to modify Forscher/Cohen's system with displaying high priority documents first when displaying a plurality of documents since it is the first document that draws a user's attention. Thus providing the most important or highest priority document would be obvious in order to acquire attention from the user.

In reference to claim 12, Forscher/Cohen does not teach displaying a plurality of documents having a greater priority than a threshold; however, Lewis teaches ranking the documents according to some predefined criteria. Setting a threshold at one of the predetermined criteria (such as importance or rank) would have been obvious to one of ordinary skill in the art at the time of the invention as a means of filtering out less important documents. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Lewis into the system of Forscher/Cohen since a user would want to review a document of high priority or importance, thus alerting the user upon the priority exceeding a threshold would draw the user's attention to important messages.

In reference to claim 27, Lewis teaches filtering documents based on priority. See page 246. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Lewis into the system of Forscher since a user would want to review a document of high priority or importance, thus filtering the

documents such that only important messages are delivered would be an efficient way of presenting high priority documents to the user without providing the less important documents that may distract a user.

In reference to claims 32 and 33, Forscher/Cohen does not teach an interaction context; however, Lewis discloses a document categorization system determines the cost of a document and ranks the retrieval of the system. The user is alerted when document considered to be relevant appears. The system determines the effectiveness of reviewing a document using a document classifier. See pages 246-249.

7. Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forscher, Stewart, "CyberNag (Mailmen Division) Project Notebook", 2/21/1996, Available: http://www.cc.gatech.edu/computing/classes/cs3302_96_winter/projects/groups/MailMen , in view of Cohen, "Learning Rules that Classify E-Mail", 1996 (as disclosed at http://www-2.cs.cmu.edu/~wcohen/pubs-t.html, as applied in claim 26 above, and further in view of Lewis, "Evaluating and Optimizing Autonomous Text Classification Systems", 1995 ACM and Doi, US 5,077668, 12/31/91.

In reference to claims 30 and 31, Forscher/Cohen does not teach a brief to provide the user a summary of documents when the user is busy or away; however, Lewis discloses a system in which an agent program monitors text streams and alerts a user when a relevant message appears. Lewis' system takes into account the expected cost of non-review at a current time and delivers the message depending on certain criteria. Thus if there is not an expected loss of non-review, the message can viewed at a future time. It would have been obvious to one of ordinary skill in the art to determine

if the user was busy or not since it takes into account the loss of not reviewing a message at the given time. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Lewis into the system of Forscher/Cohen since a user would want to review a document of high priority or importance, thus alerting the user upon the priority exceeding a threshold would draw the user's attention to important messages. Lewis does not teach a brief to provide the user a summary of the documents; however, Doi teaches a method for producing an abstract of a document in which the content of the document is reflected by preselected words of significant phrases that can reflect content of the document. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Forscher/Cohen/Lewis' system to incorporate a summary for the document, as taught by Doi, in order to characterize documents by providing a synopsis of the highest priority documents since it allows a user to quickly review the important documents without examining all the detail.

8. Claims 13-14, 16, and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forscher, Stewart, "CyberNag (Mailmen Division) Project Notebook", 2/21/1996, Available:

http://www.cc.gatech.edu/computing/classes/cs3302_96_winter/projects/groups/MailMen , in view of Cohen, "Learning Rules that Classify E-Mail", 1996 (as disclosed at http://www-2.cs.cmu.edu/~wcohen/pubs-t.html) and Platt, US Patent 6,327,581, 12/4/01 (filed 4/6/98).

In reference to claims 35-36, Forscher does not teach training the document classifier comprising one of a Bayesian classifier and a support-vector machine classifier; however, Cohen discloses the use of a Bayesian text classifier. See page 1, column 2 and page 3. Cohen teaches training text classifiers. See page 2, *Learning Algorithms*. Cohen teaches the use of training data and training sets. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Cohen's training of a text classifier using a Bayesian classifier as the classifier used in Forscher's system since it was a well-known method of training text classifier at the time of the invention and Forscher teaches using a classifier to generate priorities.

Cohen does not disclose training a document classifier comprising a support-vector machine classifier; however, Platt teaches a method of building a support-vector machine based classifier. Since it was well known in the art at the time of the invention to utilize a support vector machine classifier, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a document classifier for prioritizing documents using a support-vector machine classifier. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Platt's training of a text classifier using a support-vector machine based classifier as the classifier used in Forscher's system since it was a well-known method of training text classifier at the time of the invention and Forscher teaches using a classifier to generate priorities.

It would have been obvious to one of ordinary skill in the art to incorporate any one of Cohen's Bayesian classifier or Platt's support-vector machine classifier in the

system of Forscher since both were well-known methods of training text classifier at the time of the invention and Forscher teaches using a classifier to generate priorities.

In reference to claim 13, Forscher teaches a message organizing system in which he specifically focuses on email prioritization. See page 3. Forscher's project description comprises the following features:

-An email parsing state in which mail messages are read from a given file or input. See page 4. Compare to ***"receiving a document comprising an email"***.

-A prioritization stage in which the document will be scanned for keywords obtained from a user-defined keyword/priority setup file. See pages 4-5. Compare to ***"generating a priority of the document based on a document classifier;"***.

-Based on the priorities, the prioritization stage will assign an integer priority to the message. A word with a certain priority can then set off his or her pager. See page 3. Compare to ***"alerting a user to the document based on a predetermined criteria"***.

Forscher does not teach training the document classifier comprising one of a Bayesian classifier and a support-vector machine classifier; however, Cohen discloses the use of a Bayesian text classifier. See page 1, column 2 and page 3. Cohen teaches training text classifiers. See page 2, *Learning Algorithms.* Cohen teaches the use of training data and training sets. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Cohen's training of a text classifier using a Bayesian classifier as the classifier used in Forscher's system since it was a well-known method of training text classifier at the time of the invention and Forscher teaches using a classifier to generate priorities.

Cohen does not disclose training a document classifier comprising a support-vector machine classifier; however, Platt teaches a method of building a support-vector machine based classifier. Since it was well known in the art at the time of the invention to utilize a support vector machine classifier, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a document classifier for prioritizing documents using a support-vector machine classifier. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Platt's training of a text classifier using a support-vector machine based classifier as the classifier used in Forscher's system since it was a well-known method of training text classifier at the time of the invention and Forscher teaches using a classifier to generate priorities.

It would have been obvious to one of ordinary skill in the art to incorporate any one of Cohen's Bayesian classifier or Platt's support-vector machine classifier in the system of Forscher since both were well-known methods of training text classifier at the time of the invention and Forscher teaches using a classifier to generate priorities.

In reference to claim 14, Forscher teaches that based on the priority of the document and user settings, a user's pager may go off when receiving a word with a certain priority. See page 3. Forscher teaches that based on the priorities, the prioritization stage will assign an integer priority to the message. A word with a certain priority can then set off his or her pager. See page 3.

In reference to claim 16, Forscher teaches that based on the priorities, the prioritization stage will assign an integer priority to the message. A word with a certain priority can then set off his or her pager. See page 3.

9. Claims 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forscher, Stewart, "CyberNag (Mailmen Division) Project Notebook", 2/21/1996, Available: http://www.cc.gatech.edu/computing/classes/cs3302_96_winter/projects/groups/MailMen , in view of Cohen, "Learning Rules that Classify E-Mail", 1996 (as disclosed at http://www-2.cs.cmu.edu/~wcohen/pubs-t.html) and Platt, US Patent 6,327,581, 12/4/01 (filed 4/6/98), as applied to claim 13 above, and further in view of Lewis, "Evaluating and Optimizing Autonomous Text Classification Systems", 1995 ACM.

In reference to claim 15, Forscher teaches setting off a user's pager depending on the priority of a message; however, does not teach opening an agent based on the predetermined criteria; however, Lewis does. Lewis teaches the use of an agent program which monitors and alerts a user when a relevant message appears based on the ranked retrieval system. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Forscher with Lewis' teachings of opening an agent program to monitor and alert users of relevant messages because Forscher alerts users based on document priority which is in essence a "relevant message". Furthermore, providing an agent to monitor and alert users of relevant messages in the system of Forscher would allow the user to be notified of high priority documents.

In reference to claim 17, Forscher teaches alerting a user via a pager upon receiving a relevant document; however he does not determine when the user is busy and alerting the user upon the priority exceeding a threshold. Lewis discloses a document categorization system that determines the cost of a document and ranks the retrieval of the system. The user is alerted when text considered to be relevant appears. The system determines the effectiveness of reviewing a document using a text classifier. See pages 246-249. Lewis does not state determining if the user is busy; however, he does take into account the expected loss of non-review and alerts the user based on that. It would have been obvious to one of ordinary skill in the art to determine if the user was busy or not since it takes into account the loss of not reviewing a message at the given time. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Lewis into the system of Forscher since a user would want to review a document of high priority or importance, thus alerting the user upon the priority exceeding a threshold would draw the user's attention to important messages

In reference to claim 18, Forscher does not teach displaying a plurality of documents having a greater priority than a threshold; however, Lewis teaches ranking the documents according to some predefined criteria. Setting a threshold at one of the predetermined criteria (such as importance or rank) would have been obvious to one of ordinary skill in the art at the time of the invention as a means of filtering out less important documents. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Lewis into the system

of Forscher since a user would want to review a document of high priority or importance, thus alerting the user upon the priority exceeding a threshold would draw the user's attention to important messages.

Response to Arguments

10. Applicant's arguments with respect to claims 1-43 have been considered but are not persuasive.

Applicant amendment with respect to Independent claims 1, 19, and 26 recites a "trained document classifier". Examiner has utilized Cohen's "Learning Rules that Classify E-mail" to teach a trained classifier for purposes of prioritizing a document. Cohen discloses the use of a learning text classifier to help with classification problems when filtering and filing personal e-mail messages. Cohen discloses the use of a Bayesian text classifier. See page 1, column 2 and page 3. Cohen teaches training text classifiers. See page 2, *Learning Algorithms*. Cohen further teaches the use of training data and training sets. Compare to ***"a trained document classifier"***. It would have been obvious to a person of ordinary skill in the art at the time of the invention to implement Cohen's "trained document classifier" into Forscher's system of prioritizing documents and alerting the user based on a predetermine criteria because a classifier that can be trained would allow the construction of a system for filtering and classifying documents such as e-mail, Netnews articles, or Web pages in a manner where traditional keyword-spotting (as taught by Forscher) fails to provide the accuracy that is gained by using a trained classifier. See Cohen's "Learning Rules that Classify E-mail",

pages 1-2 in which Cohen discloses the advantages of using a trained classifier over the traditional keyword spotting techniques.

In reference to claims 8 and 22, Applicant argues that Forscher does not teach opening an agent based on predetermined criteria and further that Lewis teaches an agent that monitors messages and initiates an alert when a relevant message appears. The purpose of an agent in the Applicant's claimed invention is to alert a user based on a predetermined criteria which is exactly what Lewis' agent program does as well. Thus Lewis' agent program and the Applicant's agent are analogous in that the agent is used to perform a task (i.e. alerting a user). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Forscher with Lewis' teachings of opening an agent program to monitor and alert users of relevant messages because Forscher alerts users based on document priority which is in essence a "relevant message". Furthermore, providing an agent to monitor and alert users of relevant messages in the system of Forscher would allow the user to be notified of high priority documents.

In reference to claims 10, 24, and 42, Applicant argues that Forscher and Lewis doe not determine if a user is busy and determine whether the priority of a document is greater than a predetermined threshold and alerting the user only upon determining that the priority is greater than the threshold. Forscher teaches alerting a user via a pager upon receiving a relevant document; however he does not determine when the user is busy and alerting the user upon the priority exceeding a threshold. Lewis discloses a document categorization system that determines the cost of a document and ranks the

retrieval of the system. The user is alerted when text considered to be relevant appears. The system determines the effectiveness of reviewing a document using a text classifier. See pages 246-249. Lewis does not state determining if the user is busy; however, he does take into account the expected loss of non-review and alerts the user based on that. It would have been obvious to one of ordinary skill in the art to determine if the user was busy or not since it takes into account the loss of not reviewing a message at the given time. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Lewis into the system of Forscher since a user would want to review a document of high priority or importance, thus alerting the user upon the priority exceeding a threshold would draw the user's attention to important messages.

In reference to claims 11, 12, and 25, Forscher does not teach displaying a plurality of documents in order according to priority; however, Lewis teaches ranking documents such that the best documents are displayed first followed by the ranking of other documents. See page 246. It would have been obvious to modify Forscher's system with displaying high priority documents first when displaying a plurality of documents since it is the first document that draws a user's attention. Thus providing the most important or highest priority document would be obvious in order to acquire attention from the user. The Examiner does not utilize the Applicant's specification as hindsight to combine the references. Lewis teaches that ranking documents such that the best documents are displayed first followed by the ranking of other documents places the highest priority documents at the top. See page 246. Examiner maintains

that the motivation comes from Lewis's teachings and not hindsight based off the Applicant's disclosure.

In reference to claims 30 and 31, Applicant argues that Lewis and Forscher do not teach creating a summary of documents let alone varying the level of summarization based a function of document priority. Examiner has withdrawn the previous rejection and utilized Doi, US 5077668. See rejections above.

In reference to claims 32 and 33, Applicant argues that Forscher and Lewis do not teach an interaction context. Forscher does not teach an interaction context; however, Lewis discloses a document categorization system determines the cost of a document and ranks the retrieval of the system. The user is alerted when document considered to be relevant appears. The system determines the effectiveness of reviewing a document using a document classifier. See pages 246-249.

In reference to claims 13-14, 16, and 35-36, Applicant argues that Cohen does not teach a trained classifier-based document prioritization. Examiner respectfully disagrees. Cohen states that his goal is to see how much accuracy is lost in keyword-spotting rules relative to other classifiers. See page 1, column 2 and page 1, column 1. Cohen discloses the use of a training classifier and specifically learning classification. See page 2, "Learning Algorithms". Please also see rejections above.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachna Singh whose telephone number is

703.305.1952. Starting October 20, 2004, the examiner should be reached at 571-272-4099. The examiner can normally be reached on M-F (8:30-5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 703.305.9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RS
10/12/04

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER